CLAIM AMENDMENTS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) A decoding apparatus for decoding a data stream comprising a plurality of data blocks contained in memory, said apparatus comprising:

[[a.]] size determination means for processing a subset of the information of said data stream contained in said memory in order to determine calculate the length of a first data block to be decoded;

[[b.]] separation means for separating said first data block from said data stream contained in said memory based on said determined length; and

[[c.]] parallel processing means for decoding a subsequent second data block while said first data block is decoded.

2. (Previously Amended) Apparatus according to claim 1, wherein said size determination means is adapted to generate a size information and to supply said size information (f_sz_of_blk) to said separation means.

3. (Previously Amended) Apparatus according claim 2, wherein said size information is used by said separation means to separate said first data block from said data stream.

4. (Previously Amended) Apparatus according to claim 1, wherein said processing of said size determination means is an accumulation processing for accumulating a determined bit number of predetermined portions of said first data block.

5. (Original) Apparatus according to claim 4, wherein said plurality of data blocks are audio blocks of a media application frame, and said predetermined portions are mantissa portions.

6. (Previously Amended) Apparatus according to claim 4, wherein said determined number of bits is obtained from a bit allocation processing.

7. (Currently Amended) Apparatus according to claim 4claim 6, wherein said bit allocation processing is based on at least one psychoacoustic model, wherein power spectral densities are compared with masking curves in order to reveal said bit number.

8. (Previously Amended) Apparatus according to claim 5, wherein said parallel processing means are arranged to parse bit stream information of a first frame of said data stream and then to jump to the start of a subsequent second frame, without waiting for the end of parsing of a side information of audio blocks provided in said first frame.

9. (Previously Amended) Apparatus according to claim 8, wherein said separation means are arranged to unpack said side information of a first audio block, then parse and send an exponent information to a first processing unit of said parallel processing means, a bit allocation information to a second processing unit of said parallel processing means, and a mantissa block to a third processing unit of said parallel processing means, and then jump to a second audio block.

10. (Currently Amended) A method of decoding a data stream comprising a plurality of data blocks contained in memory, said method comprising the steps of:

[[-]]   processing a subset of the information of said data stream contained in said memory in order to determine calculate the length of a first data block to be decoded;

[[-]]   separating said first data block from said data stream contained in said memory based on said determined length; and

[[-]] decoding a subsequent second data block while said first data block is decoded.

11. (New) The method according to claim 10, wherein said processing is an accumulation processing for accumulating a determined bit number of predetermined portions of said first data block.

12. (New) The method according to claim 11, wherein said determined number of bits is obtained from a bit allocation processing.

13. (New) The method according to claim 12, wherein said bit allocation processing is based on at least one psychoacoustic model, wherein power spectral densities are compared with masking curves in order to reveal said bit number.

14. (New) The method according to claim 10, wherein separating said first data block further comprises:

sending an exponent information to a first processing unit;

sending a bit allocation information to a second processing unit; and

sending a mantissa block to a third processing unit.

15. (New)   A method of decoding a data stream comprising a plurality of data blocks contained in memory, said method comprising the steps of:

calculating the length of a first data block contained in said memory;

separating said first data block from said data stream contained in said memory based on said calculated length; and

decoding a subsequent second data block while said first data block is decoded;

wherein said calculated length is calculated from a subset of information in said data stream.

16. (New)   The method according to claim 15, wherein said subset of information is bit allocation information.

17. (New)   The method according to claim 16, wherein said bit allocation information is obtained from a psychoacoustic model.

18. (New)   The method according to claim 16, wherein said calculated length is calculated by performing a summation operation on said bit allocation information.

19. (New)   The method according to claim 15, wherein separating said first data block further comprises:

sending an exponent information to a first processing unit;

sending a bit allocation information to a second processing unit; and

sending a mantissa block to a third processing unit.